



In the Matter of )  
 )  
DECT Forum Petition to Modify the ) RM 11485  
Service Rules for the UPCS Band )  
1920-1930 MHz )  
 )

Comments Supporting  
the  
Petition for Rulemaking  
Modifying Certain Rules in FCC Part 15  
Governing the UPCS Band

Our company has strong concerns about the potential for interference from the 1915-1920 MHz portion of the H Block to the UPCS frequency band, 1920-1930 MHz. The DECT Forum Petition proposed modifications to the rules which improve the utility of the band and prepare it for wider bandwidth, higher data payload devices which will be introduced in the near future.

Due to the fact that we are member of UTAM and paying fees for the UPCS products as well as having spent great efforts in engineering UPCS devices we see a great negative influence on this business. Customers of UPCS devices may get dissatisfied by their devices.

We have an urgent interested in a quick resolve of this issue because the longer this petition is delayed the more devices will be in the field that cannot be protected from out of band emissions from the H Block, when those devices start to come into use. Alternately the sooner this petition is acted on the sooner devices will be sold with the threshold removed or raised and therefore the negative impact of H Block devices will be much less.

## I. problem

The primary problem is that the out-of-band emission limits will interact with the listen-before-talk rules of the UPCS band in a way that could deny use of large portions or even the entire UPCS band when a device operating in the H Block, 1915-1920 MHz, is nearby. Devices in the UPCS band are required to implement a spectrum etiquette based on a listen-before-talk protocol. UPCS devices must monitor and identify a usable channel before they can transmit. These devices can use any channel they locate with a power level of less than 30 dB above thermal noise,  $TN + 30 \text{ dB}$ . Additionally, if certain conditions are met, UPCS devices can operate on a least-interfered-channel basis and use channels with power levels of up to 50 dB above thermal noise,  $TN + 50 \text{ dB}$ .

## II. proposal

An interference problem has been identified created by the dissimilar rules proposed for the H Block and the existing spectrum etiquette rules for the UPCS band. The result is that potentially the out-of-band emission limits proposed for the H Block could severely limit the use of the UPCS band. The DECT Forum proposes that the threshold requirement associated with the least-interfered-channel rule in 47CFR15.323(c)(5) be eliminated and that the minimum number of channels to be monitored be reduced to 30.

These changes would amend 47CFR15.323(c)(5) from:

*If access to spectrum is not available as determined by the above, and a minimum of 40 duplex system access channels are defined for the system, the time and spectrum windows with the lowest power level below a monitoring threshold of 50 dB above the thermal noise power determined for the emission bandwidth may be accessed.*

To:

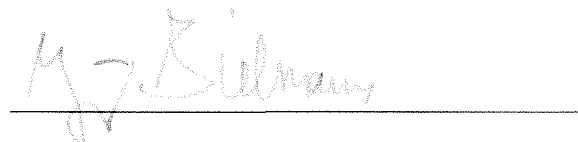
*If access to spectrum is not available as determined by the above, and a minimum of 30 duplex system access channels are defined for the system, the time and spectrum windows with the lowest power level may be accessed.*

If eliminating the threshold is not acceptable, a secondary solution is that proposed in the ANSI petition, to increase the threshold from 50 dB above thermal noise to 65 dB above thermal noise.

In addition DECT Forum proposes that the proposed out-of-band emissions for H-band devices operating in the 1915-1920 MHz band be reduced by 3-6 dB. For example, require that out-of-band emissions must be attenuated below the transmitter power (P) by at least  $49 + 10 \log (P)$ , where P is the transmit power. This will decrease the potential range limitations of UPCS devices.

Respectfully submitted,

**Aastra-DeTeWe**



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1<sup>st</sup> October 2008